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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,954	04/05/2004	Erik J. Shahoian	IMMR-0098B	2293

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EXAMINER
EISEN, ALEXANDER

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/816,954	SHAHOIAN ET AL.	
	Examiner	Art Unit	
	Alexander Eisen	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *46-55 and 85-115* is/are pending in the application.

4a) Of the above claim(s) *85-93 and 95-115* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *46-55 and 94* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election

1. Claims 56-84 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions/species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 08 June 2006. These claims have been cancelled by the Applicant in presented amendment.

2. Of the newly submitted claims, claims 85-93, 95-103 represent species of FIG. 4, which were presented by non-elected without traverse claims 56-64, and therefore are withdrawn from the prosecution for at least the same reasons, since there is no generic claims allowable at this point of the prosecution. Should be such claims found allowable, claims 85-93, 95-103 can be rejoined and examined on the merits at that time.

3. Added claims 104-115, representing the invention in FIGS. 4-6, are copied from the originally presented claims 56-64, which are not elected by the Applicant without traverse and therefore are withdrawn from the prosecution as drawn to non-elected invention.

4. Added claim 94 is generic to the invention/species in FIGS. 3 and 4, and therefore will be currently examined.

5. Claims 46-55 and 85-115 are pending in present application, claims 85-93 and 95-115 being withdrawn from further consideration as non-elected, claims 46-55 and 94 are being examined.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 46 rejected under 35 U.S.C. 102(b) as being anticipated by Ozaka et al., (hereinafter Ozaka), JP 09-026850.

With respect to claims 46 and 94, Ozaka discloses a device (mouse in FIGS. 2 and 10) comprising a housing moveable in X-Y plane; a sensor (FIG. 16, paragraph [0008]) to output a sensor signal based on the movement of the housing; an actuator 201 (FIG. 10, paragraph [0080]) coupled to the housing; and an eccentric mass 202 coupled to the actuator 201, the actuator configured to rotate the eccentric mass 202 to output inertial haptic force.

As pertaining to claim 48, the actuator (motor) 201 is configured to rotate the eccentric mass 202 in approximately in X-Y plane.

As pertaining to claim 49, the inertial force is a pulse correlated with a simulated interaction of a user controlled cursor with a graphical object displayed in a graphical user interface (see FIGS. 3-4; paragraphs [0029-31]).

As pertaining to claim 50, Ozaka further teaches that the pulse is output with a magnitude based on a characteristic of the graphical object with which the cursor interacts [0036].

As per claim 51, the haptic force is at least a vibration caused by rotating eccentric mass.

As pertaining to claim 53, Ozaka teaches the device being a mouse whereby the sensor includes a ball 104 that is configured to frictionally contact a surface on which the housing is moved, the surface being associated with the X-Y plane (FIGS. 2 and 16; paragraph [0008]).

As pertaining to claim 54, the sensor includes an optical sensor (122 and 123 in FIG. 16; paragraph [0008]) configured to detect a movement of a surface relative to the mouse housing (inherently).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozaka in view of Aarts et al., (Aarts), US 6,411,280.

Ozaka does not disclose the actuator configured to rotate the eccentric mass approximately in at least one of X-Z plane and Y-Z plane.

Aarts teaches input devices with tactile feedback provided by rotating eccentric mass in approximately at least one of X-Z plane and Y-Z plane (FIG. 2).

It would have been obvious to one of ordinary skill in the art at the time when the invention was made that in order to provide the feedback based device taught by Ozaka one can use the actuators provided by Aarts, i.e. rotating in various planes, without unexpected result or undue experimentation.

11. Claims 53 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozaka.

With respect to claim 53 Ozaka discloses a controller (reaction force control section 1 in FIG. 1; paragraph [0020]) separate from a host computer 110, coupled to the sensor and the actuator and configured to receive host commands from the host computer and a button detection section 116 and locative detection section 114. While Ozaka does not disclose that the controller 1 and motion detection section comprise a microprocessor, it would have been obvious to one of ordinary skill in the art at the time when the invention was made that the functions assigned to the above can be implemented in any known method, be it a microprocessor or programmable logic array, without bringing about any unexpected result or performing undue experimentation.

As pertaining to claim 55, the actuator taught by Ozaka is a DC motor and as such is known to be able to rotate in two directions, namely clockwise and anticlockwise, depending on polarity of voltage applied, and therefore it would not be a burden to anyone to cause the eccentric mass to rotate in two direction for whatever purposes one decides.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 46-55 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,717,573. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 46 and 1 differ only slightly in preamble wording, while remaining claims 47-55 are copied from claims 2-10.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (571) 272-7687. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Eisen
Primary Examiner
Art Unit 2629

31 July 2006